found that a table of the first 11 polynomials by Hsieh & Zopf [5] has several errors in the entries for Y_{10} and Y_{11}. In spite of the precautions taken to insure complete accuracy of the present table, the reviewer has detected a typographical error: In Y_9 the coefficient of the second term in $A_{9,3}$ should read 1260 instead of 126. Four additional typographical errors, subsequently discovered by the author, have also been corrected in the copy of this table deposited in the UMT file.

This useful and attractively printed table represents one of the more interesting applications of electronic computers to tablemaking.

J. W. W.

1. E. T. BELL, "Exponential polynomials," *Ann. of Math.*, v. 35, 1934, pp. 258–277.
2. E. T. BELL, "Exponential numbers," *Amer. Math. Monthly*, v. 41, 1934, pp. 411–419.
3. J. RIORDAN, *An Introduction to Combinatorial Analysis*, John Wiley & Sons, New York, 1958.
4. M. ABRAMOWITZ & I. A. STEGUN, Editors, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series No. 55, U. S. Government Printing Office, Washington, D. C., 1964, Table 24.2, pp. 831–832.
5. H. S. HSIEH & G. W. ZOPF, *Determination of Equivalence Classes by Orthogonal Properties*, Technical Report No. 2, Project No. 60(8–7232), Electrical Engineering Research Laboratory, University of Illinois, 1962.

88[8].—ROY C. MILTON, *Rank Order Probabilities: Two-Sample Normal Shift Alternatives*, University of Minnesota, Department of Statistics, Technical Report No. 53, Minneapolis, Minnesota, 1965.

Let $X_1, \cdots, X_m$ and $Y_1, \cdots, Y_n$ be samples drawn from two different populations. Nonparametric tests for equality of the two populations are based on the rank order statistic $\mathbf{Z} = (Z_1, \cdots, Z_N)$, $N = n + m$, where Z_j is 1 or 0 according as the jth smallest observation is a Y or an X.

The distribution of $\mathbf{Z}$ under the null hypothesis is well known: $\mathbf{Z}$ takes on each of its possible values with probability $m!n!/N!$. Milton's tables give the distribution of $\mathbf{Z}$ under the alternative hypothesis that $X_1, \cdots, X_m, Y_1, \cdots, Y_n$ are Gaussian with variances all equal to σ^2 and means μ_1 for the X's and μ_2 for the Y's. The distribution of $\mathbf{Z}$ depends only on m, n and $\Delta = (\mu_2 - \mu_1)/\sigma$. In fact if $\mathbf{z} = (z_1, \cdots, z_N)$ is a vector of m zeros and n ones in some order then the probability that $\mathbf{Z}$ takes on the value $\mathbf{z}$ is

$$P_{m,n}(\mathbf{z}|\Delta) = m!n! \int \cdot \cdot \cdot \int_{-\infty < t_1 < \cdots < t_N < \infty} \prod_{j=1}^{N} \phi(t_j - \Delta z_j)\,dt_j\,,$$

where $\phi(t) = (2\pi)^{-1/2} \exp(-t^2/2)$ is the standard Gaussian density function. Milton tabulates $P_{m,n}(\mathbf{z}|\Delta)$ for all choices of $\mathbf{z}$ and for $1 \leqq m \leqq 7$, $1 \leqq n \leqq 7$, $\Delta = .2(.2)1.0,1.5,2.0,3.0$.

The tables also contain values of the Wilcoxon statistic, the Fisher-Yates c_1 and c_2 statistics. The sections are arranged according to increasing values of $m + n$. The values of $P_{m,n}(\mathbf{z}|\Delta)$ for a given small value of $m + n$ appear on one double spread page; values for large $m + n$ are listed on successive pages; the columns are indexed by values of $\mathbf{z}$ and are arranged in decreasing order of the c_1 statistic with ties broken by the c_2 statistic.

Various applications of the table are discussed in the introduction; the most obvious application is to the computation of power functions of nonparametric tests which in the reviewer's experience can be done quite easily with these tables. These tables permitting detailed small sample comparisons between parametric and nonparametric tests are a major contribution to research in mathematical statistics.

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89[12].—James A. Saxon, Herman S. Englander & William R. Englander, *System 360 Programming*, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1968, vii + 231 pp., 27 cm. Price $5.75 (Paper bound).

This is a self-instruction manual designed by the authors to enable the beginning programmer to become acquainted with the elements of IBM 360 programming. In addition to being suitable for self-study, this manual could also be used in the class situation.

After each topic is covered, there is a "work area." The answers to questions in this section are found on the back of the page so that the correct answers are not seen until the page is physically turned.

The reader is immediately introduced to the current nomenclature of bits, bytes, words and the hexadecimal system, etc. so that a previous exposure to programming is definitely helpful and is, in fact, recommended.

As the authors rightly state, the reader will not become an expert computer programmer after having studied this book, but it is fair to add that it provides a well designed course which most intelligent folk will find both challenging and rewarding.

Henry Mullish

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